

In the claims:

Please amend the claims as follows:

Claims 1-13 (Withdrawn)

Claim 14 (Currently Amended) A method of obtaining pancreatic islet cells from dedifferentiated pancreatic cells, comprising:

adding a component of extracellular matrix (ECM) to a population of dedifferentiated pancreatic cells, ^{not limit it to culturing} which cells have undergone proliferation characterized by (a) lack of insulin expression and (b) expression of one or more of IPF-1, PDX-1, STF-1, IDX-1 and Pref-1 protein; and

culturing the dedifferentiated cells in the presence of the component of ECM, thereby obtaining pancreatic islet cells. ^{balls}

Claim 15. (Previously Amended) The method of claim 14, wherein the population of dedifferentiated pancreatic cells has been cultured until at least about 70% confluency before adding the component of extracellular matrix.

Claims 16. (Canceled)

Claim 17. (Currently Amended) The method of claim 14, wherein the ~~marker is~~ dedifferentiated pancreatic cells express cytokeratin.

Claim 18. (Previously Amended) The method of claim 14, wherein the component of extracellular matrix is laminin.

Claim 19. (Original) The method of claim 14, wherein the extracellular matrix component is a basement membrane derived substance.

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Claim 20. (Original) The method of claim 19, wherein the basement membrane is laid down by an Engelbreth-Holm-Swarm tumor cell.

Claim 21. (Original) The method of claim 14, wherein the extracellular matrix component is added by overlaying the population of dedifferentiated cells.

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Claim 22. (Original) The method of claim 14, wherein at least a portion of the cultured ^{pancreatic islet} cells form cultivated islet buds.

Claim 23. (Original) The method of claim 22, wherein the cultivated islet buds comprises hormone positive islet cells.

Claim 24. (Original) The method of claim 22, wherein the ^{cultured pancreatic} cultivated islet cells express increased levels of insulin expression as compared to the dedifferentiated cells.

Claim 25. (Original) The method of claim 22, wherein the ^{cultured pancreatic} cultivated islet cells express increased levels of glucagon as compared to the dedifferentiated pancreatic cells.

Claim 26. (Original) The method of claim 14, wherein the ^{cultured} pancreatic islet cells have the ability to secrete insulin in response to glucose.

Claims 27-28 (Withdrawn)

AM yes Claim 29. (Currently Amended) A method of obtaining pancreatic islet cells, the method comprising:

obtaining a population of dedifferentiated pancreatic cells made by (a) providing ^{islets collagenase + F.coll} pancreatic duct or exocrine cells, and (b) allowing said duct or exocrine cells to proliferate to form a population of dedifferentiated pancreatic cells, said proliferation being characterized by (i) lack of insulin expression and (ii) expression of one or more of IPF-1, PDX-1, STF-1, IDX-1 and Pref-1 protein; ^{exocrine every layer}

D1 adding a component of extracellular matrix (ECM) to the population of dedifferentiated pancreatic cells; and
cultu growing the cells in the presence of the component of ECM, thereby obtaining pancreatic islet cells.

Claim 30. (Previously Added) The method of claim 29, wherein the population of dedifferentiated pancreatic cells has been cultured until at least about 70% confluency before adding a component of the extracellular matrix.

Claim 31. (Canceled)

Claim 32. (Currently Amended) The method of claim 31, wherein the ~~marker is~~ dedifferentiated pancreatic cells express cytokeratin.

Claim 33. (Previously Added) The method of claim 29, wherein the component of extracellular matrix is laminin.

Claim 34. (Previously Added) The method of claim 29, wherein the component of extracellular matrix is a basement membrane derived substance.

Claim 35. (Previously Added) The method of claim 34, wherein the basement membrane is laid down by an Engelbreth-Holm-Swarm tumor cell.

Claim 36. (Previously Added) The method of claim 29, wherein the component of extracellular matrix is added by overlaying the population of dedifferentiated cells.

Claim 37. (Previously Added) The method of claim 29, wherein at least a portion of the cultured cells form cultivated islet buds.

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Claim 38. (Previously Added) The method of claim 37, wherein the cultivated islet buds comprise hormone positive islet cells.

Claim 39. (Previously Added) The method of claim 37, wherein the cultivated islet cells express increased levels of insulin expression as compared to the dedifferentiated cells.

Claim 40. (Previously Added) The method of claim 29, wherein the pancreatic islet cells have the ability to secrete insulin in response to glucose.

Claim 41. ^{Diabetes} (Currently Amended) A method of obtaining pancreatic islet cells, the method comprising:

(a) obtaining a population of dedifferentiated pancreatic cells made by the process of:

^{Ground claim} (i) obtaining a population of adult or differentiated pancreatic cells substantially free of islet cells, and

(ii) allowing the adult or differentiated pancreatic cells to proliferate, ^{to form a beta cell} ~~said~~ ^{dediff.} proliferation being characterized by (i) lack of insulin expression and (ii) expression of one or more of IPF-1, PDX-1, STF-1, IDX-1 and Pref-1 protein;

(b) adding a component of extracellular matrix (ECM) to the population of dedifferentiated pancreatic cells; and

(c) growing the cells in the presence of the component of ECM, thereby obtaining pancreatic islet cells.

Claim 42. (Previously Added) The method of claim 41, wherein the population of adult or differentiated pancreatic cells substantially free of islet cells is obtained from cells remaining after islet isolation from a pancreatic tissue.

Claim 43. (Previously Added) The method of claim 41, wherein the population of adult or differentiated pancreatic cells substantially free of islet cells is selected based on the ability to adhere to a container.

Claim 44. (Canceled)

Claim 45. (Currently Amended) The method of claim 44, wherein the ~~marker is~~
dedifferentiated pancreatic cells express cytokeratin.

Claim 46. (Previously Added) The method of claim 41, wherein the component of extracellular matrix is laminin.

Claim 47. (Previously Added) The method of claim 41, wherein the component of extracellular matrix is added by overlaying the population of dedifferentiated cells.

Claim 48. (Previously Added) The method of claim 41, wherein at least a portion of the cultured cells form cultivated islet buds.

Claim 49. (Previously Added) The method of claim 48, wherein the cultivated islet buds comprises hormone positive islet cells.

Claim 50. (Previously Added) The method of claim 37, wherein the cultivated islet cells express increased levels of insulin expression as compared to the dedifferentiated cells.

Claim 51. (Previously Added) The method of claim 41, wherein the pancreatic islet cells have the ability to secrete insulin in response to glucose

Claim 52. (Previously Added) The method of claim 41, wherein an agent that promotes expansion is added to the adult or differentiated pancreatic cells.

Claim 53. (Previously Added) The method of claim 52, wherein the agent is a growth factor or a combination of growth factors.

Claim 54. (Previously Added) The method of claim 53, wherein the growth factor is selected from the group consisting of: keratinocyte growth factor, epidermal growth factor, transforming growth factor- α , hepatocyte growth factor, and combinations thereof.

Claim 55. (Previously Added) The method of claim 54, wherein the growth factor is keratinocyte growth factor.

Claim 56. (Previously Added) The method of claim 41, wherein the adult or differentiated pancreatic cells are placed on a substrate in a glucose-containing media.

Claim 57. (Previously Added) The method of claim 41, wherein the population of adult or differentiated pancreatic cells is cultured until at least about 70% confluency before adding the component of extracellular matrix.

Claims 58-60. (Canceled)

Claim 61. (Previously Added) The method of claim 14, 29 or 41, wherein the component of extracellular matrix is collagen.

Claim 62. (Previously Added) The method of claim 14, 29 or 41, wherein the component of extracellular matrix is entactin.

Claim 63. (Previously Added) The method of claim 14, 29 or 41, wherein the component of extracellular matrix is heparin sulfate proteoglycan.

Claim 64. (Previously Added) The method of claim 14, 29 or 41, wherein the component of extracellular matrix is nidogen.

Claim 65. (New) The method of claim 14, wherein the dedifferentiated pancreatic cells have undergone proliferation characterized by expression of IPF-1.

D Claim 66. (New) The method of claim 14, wherein the dedifferentiated pancreatic cells have undergone proliferation characterized by expression of PDX-1.

Claim 67. (New) The method of claim 14, wherein the dedifferentiated pancreatic cells have undergone proliferation characterized by expression of Pref-1.

Claim 68. (New) The method of claim 29, wherein the proliferation is characterized by expression of IPF-1.

Claim 69. (New) The method of claim 29, wherein the proliferation is characterized by expression of PDX-1.

Claim 70. (New) The method of claim 29, wherein the proliferation is characterized by expression of Pref-1.

Claim 71. (New) The method of claim 41, wherein the proliferation is characterized by expression of IPF-1.

Claim 72. (New) The method of claim 41, wherein the proliferation is characterized by expression of PDX-1.

Claim 73. (New) The method of claim 41, wherein the proliferation is characterized by expression of Pref-1.
